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CATARACT IN CHILDREN SIMULATING NEAR-SIGHTEDNESS.

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THE readers of this journal are those who especially come in immediate contact with the young children to whom the heading of this article may apply. That the teachers of our public schools, particularly in the country districts, may be able by timely advice to perhaps save useful vision for some of their scholars, I will endeavor to explain to them in untechnical language what *cataract* is, and how it may readily be mistaken, even by *physicians in general practice*, for near-sightedness. To be more clearly understood, I here give a section of the human eye (Fig. 1). The optic nerve is

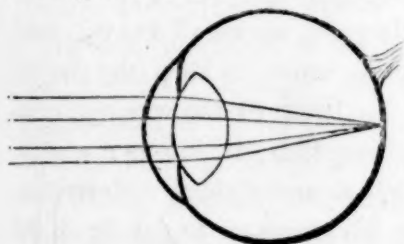


FIG. 1.

seen entering the eyeball from behind; and, through the transparent part of the eye in front, rays of light are coming, which pass through the pupil, and then, meeting the double convex lens called the crystalline, are further refracted to a focus on the retina, where a picture of the external object is painted. Cataract is a partial or total opacity of this double convex lens. Rays of light only pass into the eye through the pupil, the circular aperture in the iris. The lens is

directly behind this aperture, the edge of the pupil touching it. Consequently, when the lens is opaque, the ray cannot pass through to reach the retina, or may be so broken up as to produce only a confused image not sufficient for good vision. The greater the opacity, of course the greater the blindness. When there is simply cloudiness of the crystalline lens, the patient will see indistinctly as through smoked glass; but, when the lens is quite opaque, then they will only have perception of light as through ground glass.

Now cataract, as it occurs in children, is apt to affect the central portion of the crystalline lens, leaving the margin clear, through which the rays of light can pass to the retina, and there form a more or less distinct image of the external objects. From optical reasons, the image formed by rays of light thus passing through the outer portion of the lens is never so clear, and consequently vision never so good. In order that the rays of light may pass through the outer clear portion of the lens, the pupil must be somewhat dilated, as will be seen by the accompanying diagram (Fig. 2),

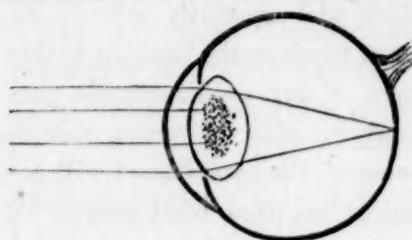


FIG. 2.

where the central rays are stopped by the cataract, and only the outer ones can pass to converge on the retina, the pupil being dilated. It will be also seen that light may then get into the eye sideways, as it

were, between the edge of the pupil and the opaque portion of the lens.

The stimulus of light contracts the pupil, as we all know; and therefore the little child with cataract, in order to keep the pupils large, seeks to avoid it by turning his back to the window, contracting his brow and partly closing his eyelids, or, in other words, *imitating the appearance of a person who is near-sighted*. Moreover, in order to obtain larger pictures on his retina, or to get the light *sideways*, he holds the book close to his eyes, perfectly simulating what a near-sighted person without glasses must do. Meantime the opacity of the crystalline lens may be of such a character, or so far back in the lens, that the pupil can to the unaided eye seem quite black, as it naturally is; and thus even the family physician

may be deceived into believing the child is simply *near-sighted*, and it is consequently allowed to grow up without the ophthalmic surgeon being consulted. The latter can, by means of his ophthalmoscope, as the instrument is called, and by employing light thrown in sideways, immediately and perfectly detect the very slightest opacity of this crystalline lens.

Now, in order that light may pass to the retina, this partially or wholly opaque lens must be either removed from the eye, or broken up and allowed to dissolve; or, if only the central portion of it is opaque and the margin transparent, and this *state is to be stationary*, modern science has shown that we may then cut out a piece of the iris, and so make an *artificial pupil* for the entrance of light, by which the little patient may be able to see very well. Experience and judgment on the part of the ophthalmic surgeon are, of course, necessary to determine this.

The earlier cataracts in children are operated on, the greater the chance of restoring or retaining useful vision. The cataract itself generally continues to change, so as to render it less easily removed from the eye, or liable to complicate an operation. Another point, however, and one not generally understood, is, that when the retina ceases to be impressed by the stimulus of light and the formation of images upon it, the eye—or, if we may choose so to say, the mind—loses a proportionate power of vision. Further still, a retina deprived of its proper stimulus ceases, together with the optic nerve, to be properly or fully developed with the rest of the body. Consequently, even if we succeed in clearing the pupil and admitting light freely to the retina, the patient will not then have the power of vision, or the appreciation of objects, which they would have had if they had been operated on earlier. This the ophthalmic surgeon too often sees, and he may even be blamed for not having accomplished what would be a miracle. The operations for cataract in children are comparatively slight, and, in these days of ether, of course not in any way to be dreaded. Again I would repeat, the earlier they are done the better. The trustees of the great eye-hospital at Moorfields in London, in a late annual report, call the special attention of the public to the necessity of bringing children for operation at an early period, instead of

allowing their eyes to be damaged by delay. Physicians and the public have recently been particularly warned, by myself and others, of the necessity of having every eye not perfect, and especially children's, examined by the scientific ophthalmic surgeon, whose advice may save to many useful vision. And I would here again call upon parents and teachers, when they notice the little ones shunning the light, holding the book near to or sideways, and seeming dull in learning their letters and lessons, to remember that *cataract*, and not simply near-sightedness, may be the cause, although their eyes look perfectly natural to the observer. Whether there is near-sightedness or cataract can only be determined by the ophthalmic surgeon; and the sooner the child is brought to him, the better for its future sight.

MATHEMATICAL TEACHING IN GERMAN SCHOOLS.

WHATEVER the Germans do, they do *heartily*. This is quite as evident in the charming pictures of German home-life drawn by Minnie Myrtle as in the impassioned verses of Schiller and Goëthe. Work, with them, never becomes drudgery, for it never "overcomes the worker." This quality, admirable enough in itself, may sometimes give undue brilliancy to their system of public instruction; for it is very certain that that system would fail if transplanted bodily to America, for instance. Still this quality of *heartiness* is essential to the success of any system. That quality wanting, there is a grain of truth in the assertion that we can learn nothing about education by going to Germany. With this concession, it must be roundly asserted that a man who cannot learn anything of fundamental importance to the science of education, by going to Europe, *should*, by all means, stay at home. The school-system of Germany is the growth of centuries. It is the product of the direct and absorbing study of her greatest men. It is one of the most pronounced expressions of the national character.

It is not necessary to recount its prominent characteristics, — graded schools, educated, professional teachers, effective and responsible supervision, and thorough examinations. The topic of

professional teaching may be discussed in future. Now it concerns us to inquire into the *machinery* of the schools, so to speak, — the means by which the surprising results of teaching are marked, — especially in the department of mathematics.

The sense of form and proportion is first trained. It is amazing that so few have noticed that children build block-houses in good proportions before they can count. It is here more than anywhere else that the philosophy of German methods shows itself. Children are exercised in drawing, in the production of geometrical figures by colored strips of paper, or by the ingenious methods of the Pestalozzian *Ausstech-schule*, in the construction of solids from blocks, and in various other ways, before they hear of figures. The combinations of numbers are there taught by means of large movable figures on the blackboard, the children meanwhile repeating every process on their slates. Elementary Arithmetics, even the wonder-working Colburn, are quite unknown. By patience and heartiness of teaching, the pupils are thus easily and thoroughly taught the fundamental operations of arithmetic. Everything comes from the teacher first, is placed on the board, then the pupil repeats it on his slate. Every day he goes over the lessons of four or five preceding days, and then adds a little. So the dreary and disheartening desert of impossible pages of rules and examples to be learned in some gloomy future is entirely avoided. The pupil knows only what he has learned. He knows nothing of what is to come.

When the *groundwork* is well done, the pupil gets a small book, about the size of the *Massachusetts Teacher*, consisting *entirely of problems*, arranged according to a regular plan; that is, several problems based on the same general principle, but varied in detail and method of solution, are placed in a paragraph. The use of this book is obvious. The *general* principle is explained and fully illustrated on the blackboard, the pupils meanwhile *repeating* every step on their slates. At the following lesson, the class must be able to solve and explain every problem given in the book which is based on that principle. This is the only *text-book* used in arithmetic; but the rapidity, accuracy and elegance of the solution of problems in these grammar classes is astonishing. In fact, I think

it is almost unattainable in our system, which groans under the incubus of "*Series of text-books.*" One is almost tempted to believe that the wholesale use of arithmetics in our common schools is a concession either to the indolence or the incompetence of instructors.

What has been said refers, of course, to the best schools. No doubt there are pedants in Saxony, and no doubt many schools far behind the times; but the percentage of poor schools is very small.

The observations and experiments of the more thoughtful educators in our country are steadily leading them to one conclusion: text-books in arithmetic must be mainly abandoned before any thorough and lasting reform is effected in the methods of teaching the subject. The time is certainly coming when the order, Arithmetic, Algebra, Geometry, will be reversed. If Dr. Hill would repeat the experiment he tried in Waltham some years ago, in this direction, he would find more cordial supporters. C. O. T.

A MOTHER'S VISIT TO A PRIMARY SCHOOL.

MESSRS. EDITORS,—I often find allusion made, in the Reports of School Committees and other educational papers, to a want of interest manifested by parents in the schools their children attend. I suppose this is so, or it would not be said; but I am also sure that many fathers and mothers are not remiss in this particular duty. If you think it will be worth-publishing, you are welcome to use the following account of a visit to our Primary School, No. 7, in S., where I have a little boy of eight years and a girl of six, to whom I attempt to do a mother's duty.

We live about sixty rods from the school-house, which is situated on a quiet cross street, and has a plain, well-gravelled, and dry yard of about a quarter of an acre in extent. The house has two rooms in it, one for the older and the other for the younger classes, where the alphabet is taught. Miss Fuller is the teacher of the latter, and Miss Meagher of the former. I am pretty well acquainted with the ladies, and like them; and they sometimes come

and take tea with me, and see the children at home. I want to say here that we don't talk *all* the time about Celia and Carl (my little ones), but I show them my home arrangements, and take them into the garden to see my flowers. They select books from my husband's library, too, with his consent; and, as he is "gifted" with a taste for fine photographs, we sometimes sit down after tea, and travel through the scenery of Scotland and England, and cross the Alps, and roam through Pompeii, without any risk to our morals or our limbs.

Well, here is the house. What a nice broad step to the door! What a good pile of dust outside the scraper! There is a heel fallen from some zealous little one's shoe who meant to be unusually nice. Shall we knock? Not at the outer door, I think; we may disturb *two* rooms, and that is one too many. What a clean and well kept entry! Not a single cap or cloak on the floor. There is a little shelf for rubbers, and an umbrella-stand on each side, carefully numbered. There is a long mat reaching across the entry. I notice the floor has no papers upon it; but a little box fastened up in the corner, breast high, holds an abundance of these, and "all sorts" of things besides. Now let us knock at the door on the left hand. "Is Miss Fuller in?" I inquire, and the lady follows her little door-opener, and gives a cordial "Good-morning" to her visitors. She asks us to come in and take seats, — she has *three* chairs in her possession, and a table, — and we do so explaining our wishes and stating what time we can stay. On some occasions she might do as many teachers always seem to do, — namely, show her best class, and all the pretty things they had acquired; but to-day she does not. She has other business on hand. The previous day, just after the morning exercises, a little fellow had shouted as he entered the door, "By Moses! ain't it cold!" and, being overheard by the teacher, the peculiar form of adjuration had suggested to her to take the opportunity thus naturally offered for some wholesome moral instruction. In pursuance of this, she sketched, in language suited for childish comprehension, the early history of the exposure of the "pretty infant" in a "little rush cradle" on the shore of the Nile, and drew a vivid picture of the risk from drowning and the crocodiles; pictured to them the king's

daughter coming down in the cool of the morning to bathe, with her maidens in company; the discovery and adoption of the child; his education in wonderful things; how the good God called him to set free so many slaves; what a humility and reverence he always showed; how many hard trials he went through; how, at last, after all his labors, he was not allowed to enjoy the beautiful prospect across the Jordan, but died and was buried in an unknown grave, with "no pretty white stone" nor green grass around to arrest the eye; and, when the attention was fully engaged, she suddenly said, "Don't you think Moses deserves more respect and honor than Oscar showed to his name when he used it in the form of swearing, yesterday?" From this the transition was easy, and well improved, to refer to some of those ingenious, meaningless, profane expressions, into which even children of correct deportment fall, as well as to set before them the teachings of the Saviour in regard to all forms of trivial swearing. This was done with so much naturalness and at the same time seriousness, that we were convinced her little listeners had not been without several similar experiences. She then remarked that on the morrow they might ask her any questions about Moses they thought of, and tell her any facts they knew about boys and girls who once had used improper words, but did so no longer.

"That will do for this morning; now I want to hear the verses and the alphabet, and then we will have a pyramid of figures made on the blackboard." A little hand shot up suddenly. "What is a pyramid?" "Oh, I'll show you, Henry, by and by; and, when you have learned 'How doth the little busy bee,' you may make one." Henry is deep in study for a few moments, and then is seen negotiating for a pencil and slate.

A quiet sign meanwhile had called a little division of eight pupils to a position before a blackboard. The teacher remarked to me that the children had reading-books, from which they often spelled and read, but not always. This morning the reading-lesson was one not yet written, and we were invited to suggest a subject. At first this was declined, but, upon Miss F.'s repeating the request "clock" was selected.

The little boy at the head was asked to say something about the

clock. "It ticks," was the prompt response. "It has a round face," said another. "It has little black marks on it," said a third. "It has got some gold up there"; "it has hands"; "it strikes"; "it has a picture on the little box at the bottom," — these and some other peculiarities soon were uttered by the class. Miss F. then proceeded to work up a reading-lesson for the morning. It was somewhat like this:

"We have a clock in our school-room to keep time with. It hangs upon the wall, where it can't be reached. It has a pretty, round face with marks upon it. When it goes we can hear it tick. When it ticks the little black irons on its face move. These are called hands, and the clock keeps its hands up at its face all the time, like some children. [This was from the teacher.] The gold on it is very thin, and is called gold leaf. The little box at the bottom is the house where the pendulum lives, and walks backwards and forwards. Some time the clock shall be opened, and we will see it walk. There are some nice, bright wheels in the clock, and by means of these it goes a whole week at a time." The young learners seemed very much entertained that their little notices could make a reading-lesson, and with earnestness began to con its periods. Miss F., after carefully and distinctly reading it, pointed out several words to spell in the afternoon; then had each one read a sentence; after which all read it together, and were sent to their seats to study it until they should be perfectly familiar with its words. This would take, she informed us, a few repetitions to accomplish. After this, on another board she recorded the date of the exercise, and then erased it "for forthcoming novelties." Quite a number of dates stood upon the record-board referred to, and we were told these were to suggest a proper time when to repeat and enlarge the lessons already given. In this way Miss F. said it was her practice to exhaust ten or twelve separate themes each half year, aiming to secure thought, spelling, reading, composition, and, when old enough, writing or printing in connection with each.

The exercises which followed — namely, singing, practice on the numeral frame, figures in many of their simplest combinations, "two ways to tell a story," original gymnastics, both pleasing and exciting — I cannot talk about in this letter, which has already become

too long. On another occasion, if you desire it, I will send you a description of the visit we paid to Miss Meagher's division in the same building.

A PARENT.

THE HEALTH OF SCHOOL-TEACHERS.

A LETTER TO THE HON. E. E. WHITE.

DEAR SIR, — You ask for a practical article on the Health of Teachers. I have no doubt that you know more about this topic than I do; nevertheless, since the subject is important and much neglected, I comply gladly with your request.

My own brief experience as a teacher led me to believe that the business is one which ought to be favorable to health. I know many persons who have followed teaching twenty-five years, and others who have served in this capacity for fifty years, without injury to health and without growing prematurely old. If one has the love for it, the constant companionship of children ought almost indefinitely to keep the heart young; and, where the heart is young, the body will not grow old so rapidly as when life is sad and unjoyous. And yet teachers do not generally possess good health, nor live as long as they might. I have been told many times by professional teachers, whose opportunities for observation were good, that ten years of hard service is quite as long as most persons can endure the work of the school-room, and that a multitude of them cannot endure it half so long as this. Indeed, if it were not for their long vacations, many could not follow the profession at all.

Yesterday I visited two schools in New York. In one of them I found a model teacher. She had charge of a large class of children, from seven to ten years of age. She loved the children, loved to teach, and all her pupils devotedly loved her. The principal of the school said she was a most successful teacher. She had what physiognomists call the teacher's temperament. She was tall, slim, active, and was all alive to her duty. Visitors looked on in mute astonishment at her wonderful power in unfolding and drawing out the youthful mind. A friend sitting near me whispered, "If I had had

such a teacher in my youthful days, I should have loved instead of hated the school-room." Yet this teacher, although she has not taught long, is failing in health, and feared she would have to give up the work. I thought I saw why she was failing. She had too little vitality to keep her nervous system at so high a degree of tension during six hours of the day: for, mind you, a successful teacher uses up the life-power very rapidly; and, as each individual has only a limited supply, if too much of it is used up in brain-labor the body will not have enough to digest sufficient food, to circulate the blood to every part of the body, to nourish well every tissue, to keep up the animal heat, and of necessity the bodily functions deteriorate and ultimately fail. I have reason to believe there are many teachers of whom this one is a type.

The best advice I can give them is, that they teach a less number of hours per day.* Nor should they enter so enthusiastically into their work, but take work more easily, be cool and calm and quiet, and sleep a great deal. Eight hours' sleep will not be any too much for such teachers. They should use up no vitality in breathing bad air, in excessive exercise, in evening study, in anxiety about their work. Such teachers are sometimes too conscientious, and are afraid they will neglect some duty, but they are the ones who need borrow little trouble on this subject. Their duty to themselves should be paramount. Such teachers ought to take good care of their digestive apparatus, that they may digest nourishing food. There should be no pressure of clothing over the stomach, liver, heart, and lungs. They should keep the muscles of the

* We have seen a primary teacher use as much brain and nervous energy in giving an oral lesson, as would be required to deliver an ordinary lecture, and the exhaustion of the vital forces was quite as great and serious. Is it strange that such teaching, continued six hours a day, destroys health and life? Few public speakers think of giving as a practice even two lectures a day. We have tried the experiment of giving four lectures daily, and we do not care to repeat it. But we have referred to this matter to draw from it an important conclusion: *The introduction of oral teaching in our primary schools must be attended with a reduction in the number of school-hours.* If these two reforms do not go together, scores of our best primary teachers will prematurely break down. Four hours of oral teaching is far more exhausting than six hours of ordinary lesson-hearing. — Editor of "Ohio Educational Monthly."

chest, sides, abdomen, and back gently exercised by some daily gymnastic exercise or light labor. They should dress the feet and legs so that the extremities will not suffer cold. They should expand the lungs daily in fresh air, so as to keep the air-cells open to allow air to pass to the blood; and finally they should find out how much they can do and not be overworked, and confine themselves to this amount of work. When vacation comes they should make it a time for full recuperation and rest. If they cannot or will not do these things, they must expect to suffer and finally fail.

But there is another type of teachers than the one just mentioned. I saw a dozen of them yesterday in another school. They did not do half enough work for their pupils' or their own good. Their labors had about as much life in them as the movements of machines. They sat prim and upright on their chairs, and went through the forms of hearing a recitation, but they spent not one-fourth as much strength as the teacher first referred to. And yet these teachers looked pale and bloodless, though not so thin in flesh as the other. They complained of sick-headaches, listlessness, dulness, and inertia. I think I know why. Their school-rooms were not ventilated, and their dresses — for they were lady teachers — were so tight they could not breathe more than half enough to keep the body thoroughly alive. Such teachers need more exercise and fresh air to keep them well. They ought to go to a gymnasium, and practice gymnastics daily in gymnastic costume. They ought to throw open the windows of their school-rooms, and always have fresh air. They ought to take a thorough bath at least three times a week in a warm room, being sure to get up a warm glow after it. I know there are hindrances to doing all I suggest, but there is no apology for their neglecting all the laws of health, at any rate.

I think it would be wise, if, in the country, teachers would, in fair weather, spend part of the day with their pupils in the open air, studying the plants and minerals that abound. It would be for the health of pupil and teacher. A spot of land devoted to gardening might, if rightly used, be both a source of education and health. This requires to be well done to make it successful.

There are few professions to whom good health is more important than to teachers. They can govern their schools and impart instruction easily and thoroughly when well; but, when ill, everything goes wrong. Many a pupil has had his ears boxed and his back striped because the teacher was out of sorts; and often the teacher's health and good-nature have caused him to pass over, as of little moment, even grave offences. I am more and more convinced every year that teachers are poorly qualified to fill properly their vocation, unless they have sound constitutions, thorough physical culture, and physiological knowledge. These qualifications, added to the thorough drill now given in normal schools and colleges, would make them the most healthy class of our citizens, instead, as now is too often the case, nervous, dyspeptic, scrofulous and consumptive, and broken-down in body, before they have more than come to maturity.

Respectfully,

M. L. HOLBROOK.

—*Herald of Health.*

PROFESSIONAL TRAINING.

AMONG the things which have passed from the realms of doubt or ridicule into the category of established and immutable truths is the proposition that teaching is a science, and the teacher an artist. Over the growth and development of every plant and leaf and flower and fruit, of every organic body, animate or inanimate, in the whole material universe, God has thrown the regency of his own everlasting laws, saying to the inquiring soul of man everywhere, "See how they grow." And no sublimer discovery has rewarded the investigation of the ages than that the spirit itself of man, the subtle, wonderful, deathless *knowing and thinking powers* of the soul, are in the grasp of laws equally harmonious changeless, and inexorable. If right culture gives strength and majesty to the tree, grace and beauty to the flower, symmetry, health, and power to the animal; while wrong treatment gives weakness, deformity, and disease,—as surely do the growths of the mind respond, in nature and value, to the kind of nurture which they receive. Go to the gardens, the orchards, and

the herds of the wise and skilful, and then to those of the ignorant and slovenly, and see, contrast, reflect, and be convinced. Come with me to the school-rooms where Wisdom opens the beautiful gates of knowledge; one by one where charmed groups are led onward by gentle hands, and upward by the sure and easy gradients which God himself has hewn for young feet in their ascent towards himself; where, through outward forms of visible and tangible things, so full of interest and beauty, and so profusely strewn on every hand, the mind unconsciously rises to the upper level of conceptions and thoughts, to the grasp of ideas as well as of material things; where, all the way, the clear sunlight of appropriate, attainable, and definite knowledge beams steadily upon each day's lessons, and sweet, glad inspirations refresh the heart and make buoyant the steps, till the years of school life are ended, and the State receives back her children, keen, alert, observant, intelligent, knowing something of books, but more of things, joyous, in sympathy with the facts and problems of nature and of being, and ready for the battle of life. Come with me, again, to other school-rooms, where the cold sterilities of text-books are the alpha and omega of instruction, — to whose teachers the mental powers of the pupils are an unknown and inexplicable tangle, under no fixed laws of prior and sequential activity and growth, and hence to be plied at random with whatever comes first to hand, the simple or compound, the abstract or concrete, the objective or subjective, alike, where perception, conception, reflection, imagination and memory, and all their shining sisters of the mind are supposed to be of synchronous birth and development, growing simultaneously and *pari passu*, like the fingers and toes, and like them to be all, without distinction, forced into one mental glove or boot; where words, words, words are the stones fed to little ones starving for the living bread of things, facts, realities; where verbal definitions, utterly meaningless to those who repeat them, are substituted for the quick, clear, sharp, definite knowledge afforded by the eye, the ear, or the hand; where the weary hours of school life drag heavily and joylessly along, till the end comes, when they take their books home, and begin the active duties of life, for which they are but little better fitted than before.

Compare these schools, teachers, and results, and measure, if you can, the difference in the kind, amount, and value of the returns which they make to the State that provides for and fosters them all alike. I repeat, teaching is a science, and the teacher is an artist; and the more thoroughly the principles of that science are understood, and the skilful practice of that art is acquired, the better will be the quality of the work performed. If teaching is a science, its principles may be stated, defined, and mastered, the same as those of any other science; if it is also an art, skill, dexterity, and success may be attained in the practice of that art, the same as in any other. This is an obvious, common-sense view of the matter. If the premises are granted, the facts and results must necessarily be as stated above. And the premises cannot be denied; they have ceased to be challenged, throughout the educational world. It is utterly impossible to account for the rich and blessed fruits of the teaching in some schools, and the lamentable barrenness of that in others, except upon the hypothesis that teaching is a science to be learned, and an art to be acquired, and that in the former case the schools are taught by competent professional teachers, while in the latter case the teachers are ignorant both of the science and art pertaining to their profession. The two classes of schools which I have attempted to sketch are not the deductions of theory, or drawn by the imagination: the originals of the pictures, substantially, may be found in all portions of the State. At present there are fewer of the first class than of the second, but we hope for more and more of them.

Not that all teachers are capable of achieving equal success, even with the same advantages of professional training; that is impossible in any human pursuit. There are persons whom no amount or kind of training can make successful teachers, and who should therefore never seek to enter the profession. The number of such persons is, indeed, greater than is generally supposed. It is simply claimed that special preparation is as essential for the work of teaching, as for any other important and difficult human pursuit; and that such preparation will do as much for the educator as a like preparation will do for the member of any other profession; that no man is born a teacher, any more than a lawyer

or an engineer; and that, other things being equal, he who, by careful study and special preparation, is master of the theory and art of teaching, will always and everywhere, and of logical necessity, be incomparably superior to him who has had no such advantages. — *Report of Hon. Preston Bateman.*

EDUCATION IN KANSAS.

BY L. B. KELLOGG, NORMAL SCHOOL, KANSAS.

It was an ugly contest, long continued and vindictively urged, through which Kansas passed, before it was fairly decided that men should forever be free and equal throughout her borders. Ague, scanty fare, anxiety, and hardships without number; ghastly wounds; graves of little children; lives of brave men and women, — these were the price paid for freedom. Ought it not to be guarded well? The spelling-book and Bible were the chosen symbols of the new civilization now begun on the fertile plains of the Central State; and both were to be free and common as the air.

But the men were not alone in the rude cabins, not alone with the famine and the Border-Ruffian fights. Women, brave and intelligent women, were with them, holding up the hands of husbands and sons, nerving the hearts of Free-State men, and shaming the minions of slavery; staunching the blood of loyal freemen, and spilling the blood of disloyal slaveholders. And the men are not alone in the fruit time and harvest. Having shared the famine, the women now share the plenty. All having fought to establish freedom, all now enjoy it. In the Constitution of no other State are the rights of females so liberally interpreted and so clearly provided for as in Kansas. Among other provisions touching this subject, the instrument declares that "the Legislature, in providing for the formation and regulation of schools, shall make no distinction between the rights of males and females."

In accordance with the spirit of this declaration, the Legislature, at its first session in 1861, passed a law making all white female persons over the age of twenty-one years, subject only to the exceptions which apply to males, legal voters at all school-district meetings. The women have voted ever since. There having been some ques-

tion, however, whether they were entitled to vote at elections held for the purpose of voting bonds for the erection of school-houses and for other special purposes, the Legislature of 1868 pronounced by law emphatically that females are entitled to vote at all such elections. Not only do women vote at school meetings, but they are voted for as school directors; and so Kansas witnesses each year the voting of wives for or against their husbands, and the voting of husbands for or against their wives. Certain men in nearly every district deplore the alacrity with which the women vote taxes for building new school-houses, for buying outline-maps, and other apparatus, and for painting, fencing, and planting shade-trees in the school-yards, etc. The teachers and the children bless the women for these things, and the world is the better for their extravagance.

The co-education of the sexes in every grade of school and in all departments of study is an integral part of the Kansas educational scheme. The State University opens its doors and grants its honors on equal terms to males and females. The State Agricultural College does the same thing. So does the Normal School, and so does every college, seminary, and academy in the State, with two exceptions, — an Episcopal female seminary at Topeka, and a Catholic school for girls at Leavenworth.

Respecting the education of negro children, the school law, passed at the first session of the Legislature, provides that "equal educational advantages" shall be extended to all children in the State. A clause in the law leaves it to the discretion of the Boards of Directors whether the colored children shall be educated in separate schools, maintained for them alone, or with the white children. But since, in certain localities, there was found a disposition to exclude negroes from the public schools, the Legislature of 1867 took cognizance of the matter by the enactment of a law, conditioning that when *any* children are denied admittance to the schools by any Board of Directors, the members of the Board shall each pay a fine of one hundred dollars for every school month so offending. In case of refusal or neglect to pay the fine, the members of the Board shall be imprisoned in the county jail. At the session of 1868, long speeches were made upon a proposition to repeal this law, but it still holds good. — *The Schoolmaster*.

Editors' Department.

THE ABOLISHMENT OF THE SCHOOL-DISTRICT SYSTEM IN MASSACHUSETTS.

"The school-district system in this Commonwealth is hereby abolished." So reads the first section of an act approved by the Governor of Massachusetts, March 24, 1869. Thus is removed the greatest obstacle in the way of educational advancement throughout the Commonwealth. For many years, the struggle between the town system and the district system has been carried on with earnestness and, in not a few towns, with much bitterness of controversy. With hardly an exception, the larger towns long since abandoned the district system, and consequently are now enjoying the advantage afforded by good school-houses, good teachers, and well organized and graded schools; while the smaller towns, which for the most part have clung to the district system with remarkable tenacity, have, with some exceptions, made comparatively little progress in school affairs.

The origin of the school-district system of Massachusetts is found in an act passed in 1789, the second section of which provides "that the several towns and districts in this Commonwealth be, and they are hereby, authorized and empowered, in town meetings to be called for that purpose, to determine and define the limits of school districts within their towns and districts respectively." This law provided simply for the division of each township into distinct portions of territories for the convenience of the school children, the schools being still managed solely by the town authorities.

In 1800, an act was passed which authorized the holding of district meetings to choose a clerk, to raise money for the erection and repair of school-houses and the purchase of the necessary utensils. Thus was the district system established. From time to time, additional authority was given to the districts.

In 1817, the districts became corporations that could sue and be sued, and could hold real and personal property for the use of the schools. In 1827, the districts were empowered to elect prudential

committees, whose function was to have charge of the school-houses, and to select teachers and make contracts with them; and thus was the system made complete in its power to obstruct the progress of popular education in the Commonwealth.

We have neither the time nor the disposition to enter into a formal discussion of the district system, nor is such a discussion now necessary. The system has been abolished by the almost unanimous voice of the Legislature; only nine votes having been given in the House of Representatives in its favor, and none at all in the Senate. The successive Secretaries of the Board of Education have repeatedly and earnestly protested against the system, presenting unanswerable arguments, which ought long since to have brought about its abolishment. An admirable summary of these arguments may be found in the twenty-sixth Report to the Board of Education, prepared by Secretary White.

We rejoice that the system, which has so long been a serious hindrance to educational improvement in the smaller towns of the State, is now among the things that were; and we firmly believe that this change in the administration of school affairs will speedily accomplish results so satisfactory that all friends of education will gladly recognize them, and will confess that, in this case at least, the new is better than the old. "Better school-houses, better teachers, better schools," will now be the demand in all parts of the Commonwealth, and the demand is sure to be liberally answered.

READING.

DISCUSSION AT THE EDUCATIONAL ROOM, MARCH 6TH.

Mr. SMITH of Dorchester. The great question in my own mind is: From what stand-point shall we teach reading, — the elocutionary or the emotional? There is much artificial reading produced when the instruction is chiefly elocutionary, and tones are thus superinduced which are discordant with the sentiment. Now, is it not better to approach a writer from the spiritual than from the elocutionary point of view?

Mr. JONES of Boston. Emotion, to a great extent, must be artificial in those school exercises which are largely mechanical or memoriter, and these affect the delivery in reading. In laboring to develop the right amount of feeling, it would be better to have the pupils try to read without hearing the teacher, for this superior rendering of the piece is discouraging to them. Singing, in those city schools where Professor Mason gives instruction, has improved the tones of the

pupils, and the quality of the reading. In trying to bring out emotion, I should select a few examples for drill, and have the pupils practise chiefly upon those; while, in the appointed reading exercise I would endeavor primarily to bring out the thought.

Mr. SMITH. Do we not make a mistake in allowing scholars to recite any part of any lesson in improper tones? Why not correct mispronunciations, also, every time they occur, even if, for example, the tables recited are given correctly?

Mr. CHASE of Watertown. I am in favor of the subjective method, and agree that the singing way in which tables are recited, and all learning by heart, ruin the children for reading; and, when such methods are wrought into them, it is next to impossible for them to again become natural in their delivery. I recollect one reader whose mother accounted for her excellence by saying that the child had never heard baby-talk at home, nor any language which would be unsuitable in the drawing-room. Good reading should bring out all the appropriate forms and shades of emotion.

Mr. M. G. DANIEL of Boston. If we had to say the multiplication-tables as many times as the pupils do, I think we should sing them. Different teachers send up differently trained pupils. Some scholars are taught to understand thoroughly the lesson, while their enunciation is neglected until it is difficult to improve it; and others acquire the elocution perfectly, but are ignorant of the sense. If we should confine pupils to pieces which are easily understood, they would read well; for it is by assigning those which are above their comprehension that mechanical readers are made. If correct utterances are not maintained by frequent drills, slovenly habits are acquired; and I would have some good selections used solely for this purpose, hoping that the sentiment of them would be readily acquired. In other selections, as they improve in apprehension, they will in reading. It is difficult to get scholars to study their reading-lessons, which cannot well be learned unless they are read aloud at home.

Mr. SMITH. Would it not be well sometimes to render a passage absurdly, and, by criticisms upon it, develop correct methods? Some teachers might succeed in this way, who are timid about reading themselves, so as to bring out the ideas fully and correctly. There are some who do not seem to understand how much is embraced in teaching reading, like a teacher who took her pupils through the "Deserted Village" in one hour, and "The Traveller" in another, and then thought that her work in them was completed. Elocution may be memorized as well as words, as has been the case with some distinguished speakers. I would have elocution come in apart from the reading, and refer to its principles, or engage in its practice, as occasion required. If a teacher is thoroughly interested in the reading-exercise, he will not fail to secure improvement.

Mr. PHILBRICK. I fear that some of the speakers do not make any distinction between an exercise in reading and one in English literature, which, though similar, appear to me to be separate studies.

Mr. JONES. In primary schools, upon opening the primer to a new piece, I

would ask the children to notice closely the picture, and the first thing that was said; then, with the book closed, I would inquire, "What does it say in the book?" and I think the answer would be given naturally. This method would correspond with that in vogue among our public readers, most of whom look at their books as little as possible.

Mr. PHILBRICK. Recently, when visiting a newsboys' school, I was struck with the sonorous tone with which all were reading. It sounded just as if they were crying out, "Journal," "Herald." This was not owing to any training of teachers, but to habit. On another point, one of the most admirable teachers of my acquaintance taught her pupils to understand all they read; yet at the same time, when they were tried on a page which they had not studied, they blundered badly.

I have known a teacher of talents to secure very defective reading by objecting to every slight mistake, and thus destroying the self-confidence of the pupil. I believe in thoroughness in everything, but think that a cursory and even imperfect reading of a number of pages is sometimes advisable in order to develop self-confidence and secure fluency.

Reading is a matter of imitation, and the faults of the teacher will be acquired by pupils. A very noticeable change has taken place in the Boston schools within a few years. Almost no sing-song or monotone is now heard, and the power of calling words at sight has been developed.

In no lesson may the sense be wholly ignored, but the analysis of a piece may be carried to such an extreme as to become tiresome. A reading exercise, on the other hand, should not be selected entirely for elocution, yet some will afford means for drill better than others. Some pieces are to be taken as studies in literature, and some to develop a taste for elevated reading. In the lower school nothing can be done with reading as a fine art; but this should be practised in the higher, whenever time will allow. All these points should be brought out during a course of study, and in the best ways.

Mr. CHASE. It is profitable to blend the critical with free and extended reading. Some children are unable to take the right tone from the teacher, but they can get it from other pupils. In order to prevent servile imitation, the teacher can read from another place, and the child reason how to apply this manner of reading to the lesson or passage assigned. One day may well be given to developing the idea, and another to drill upon sounds and tones. A drill upon tones without application is objectionable, because the pupils will be unable to see its utility.

Mr. COLLAR, of Boston. Some teachers have an unwise fear of showing pupils how to do a thing. Ofttimes there is an inspiration given to the whole class by the teacher's reading. It would be well to have half a dozen sentences, like the one under consideration, made up and used for practice. I think children get the general idea of a simple piece readily, and that it is very irksome for them to be required to define and explain what they so clearly comprehend.

Mr. WHEELER, of Cambridge. It must be conceded that children will com-

mit to memory without getting the idea; and, if they will do this, I think they will read without understanding.

Mr. PAYSON. The difficulty in the case of young children arises from three things: First, the books commonly used are too difficult; second, the sing-song way in other studies induces bad reading; and, third, intolerable memorizing prevents good, intelligent reading. Hosts of people cannot tell what they have read after the book is closed.

Mr. BENTLEY, of Brookline. We must conclude that, for good reading, accurate knowledge and correct utterance are requisite; but how shall we get a sufficient amount and force of voice?

Mr. CHASE. We cannot cure low reading by telling the child to read louder, nor by reading ourselves. We must do it indirectly. It is no use to tell him to have confidence in himself, for he cannot. We must develop this by degrees. These troubles should be prevented or obviated early; if they are not, we must spend a long time in remedying it, and accomplish our object by quiet, persistent leading. This we may do; and, having trained the pupils to it once, the best ways can easily be continued.

ORDER IN SCHOOLS.

DISCUSSION AT THE EDUCATIONAL ROOM, APRIL 3D.

Question for debate: "What degree of 'order' should we endeavor to preserve in school, and what means should be used to secure it?"

The PRESIDENT of the meeting. The quietness of a school is an important division of our question, and one which is daily forced upon our attention. What shall be aimed at in this direction? Is all noise to be prohibited, or is there a certain amount or kind which shall be esteemed legitimate? Movement of the lips in study, passing from one part of the room to another, and the handling of slates, books and pencils, are all, at times, sources of disturbance; and the presentation of methods and experiences of teachers present will add to our mutual fund of information. We have seen some very still schools which did not accomplish the work of education, and some very noisy ones which did. Is that painful stillness under any circumstances desirable? Again, whispering is an evil that demands consideration. In my school it is absolutely forbidden, and yet it exists, in spite of the most stringent measures to prevent it.

Mr. LITTLEFIELD of Charlestown. There is always a hum to business, and this I would allow, if nothing more. The school is the child's workshop and no regulations should be made which will tend to interfere with the object sought. All movements are to be made as quietly as possible, with the thought prominent that stillness is not an end in itself. I find that the order in the school-room is greatly promoted by allowing and encouraging what some might call disorder on the playground. The noise arising from their sports is so much vocal culture, and the fresh air is inspiring. The teacher ought to go out with the pupils, and, by witnessing—or, if he chooses, participating in—their plays, his own circu-

lation will be enlivened, and he may learn from what he witnesses in the yard how to deal more judiciously with some of his troublesome scholars.

Mr. WATERMAN of Newton. I have learned to exercise a great degree of charity for some boys who are the leaders in sport, and yet are very dull in their studies, for it is evident that they can become able and useful men in some active pursuit. In respect to the movements of pupils, there seems to be no objection to requiring them to be made upon tiptoe whenever the noise of their feet would disturb others in their work. We are careful to enter or leave a church during the hours of worship with the utmost caution, and the children need to be trained to the same noiseless walking. The amount of noise that may be permitted depends upon the number of classes there are in a room. If but one, then all are engaged in the same thing at the same time, and noise will not produce disturbance; but if there are two or more classes, some scholars must be studying while others are reciting and the necessity of quiet is much increased. I have been accustomed, on entering a new school or a new school-house, to devote a liberal portion of time, during the first day or two, to practising movements about the room, and have found that this extra labor and trouble at first, paid well afterward. Military drill, on the part of pupils or in the community, has a marked effect upon the order of the children. Some noise must arise from the taking out and putting up of books, and the simplest way of removing the disorder which often accompanies these movements is, to have them made by the whole class, at a given signal, and promptly. Sometimes there will be noise in a wide-awake recitation; but, if it arises from interest in the lesson, it is not objectionable.

Mr. PAYSON of Chelsea. I suppose all teachers endeavor to have their pupils spend the recess upon the playground, but often find that some are not inclined to go out; and I have even known children to bring notes from their parents, stating that they did not desire them to participate in the exercise of the yard at all. Feeble and unruly scholars are sometimes detained in the school-room, and the teacher is necessarily led to spend his recess in-doors. In walking across the floor, boys intentionally or heedlessly get into the habit of making distinct reports with the heel and toe,—a trouble which it is difficult to remedy. Not only among scholars, but among grown-up people, there are many who always ascend the stairs with scuffling; and I am at a loss how to cure this. When a pupil goes across the room with a heavy tread, I am accustomed to call him to me, and to ask if I am not as heavy as he is. Being answered in the affirmative, I then inquire, lifting my foot, if my boot is not as thick. This being clear, I am able to make him understand that he can and must make all his movements as quietly as I do. But the point to which our attention is chiefly called is quiet in the school-room; and I confess that, with many years' experience, I am satisfied that a deathlike stillness in the room is not to be desired. There are times when all the pupils are so busily engaged in study that the clock may be heard to tick plainly for half an hour; but this stillness arises from the nature of the work going on, and from intense interest in it. At another time some stir and noise will indicate the same measure of interest in another study; and, in

every case, the noise which may properly accompany a study, or a method of instruction, is entirely unobjectionable.

Mr. WHEELER of Cambridge called for a display of hands on the part of those who require their pupils to go out and stay out at recess, and about half of those present responded. In a like manner it was ascertained that about one-third of the teachers go into the yard at recess.

Mr. MANSFIELD, of Cambridge. I have been informed by visitors that my school is remarkably quiet, and yet I am not accustomed to give many directions respecting stillness. I desire a still school, because noise is generally distracting to pupil and teacher, but yet do not believe in having much machinery at work to insure it. Why should not quiet pervade the room? A scholar is at his desk with a specific task to accomplish. He may consult this book; use this slate; open the lid for some desired aid in his study; but what should we think of some person here, who, while our discussion is going on, should drop a book from his hand several times, or knock a slate from a table? The acts would be very careless or very culpable, and we should exercise whatever authority we might possess to prevent their recurrence.

We do not want our own children to be rude at the table, kicking or pushing or speaking unbecomingly; nor do we on the other hand desire them to meekly move about as if they had no privileges and no pleasures at home.

The work of the school will proceed with the least friction when the pupils are permitted to act naturally, without undue restraint; but conscious of one another's presence, and with regard to the object for which they are assembled. I should not require pupils to walk upon their toes habitually, but should expect them to do so whenever they would cause disturbance by walking as usual. Every person is bound in courtesy and propriety to make as little disturbance as possible, but is not to be kept in painful posture or forced stillness. It is to be feared that some teachers are giving so much attention to the mechanism of the school-room that the pupils lose sight of the true purpose of the school, and are called upon to think more of the manner in which they must sit and walk than of their studies. Let them understand that here is the work to be done, and here are the means of doing it, and they are to let nothing occur which shall delay its accomplishment.

Mr. HAGAR of Salem. Reference has been made to the buzzing sound often heard in the school-room. I am generally led to believe that the method of study is wrong when this is heard. The pupils are committing words to memory; and, as one sense may aid another, the hearing helps the sight.

Most study should not be of this kind; and whenever a person is deeply engaged in tracing out a chain of reasoning, or is developing his own thought upon any subject, the harder he thinks, the stiller he is. If I assign a lesson to be learned, it is not with the design of having it mainly memorized, but studied and understood thoroughly.

In respect to walking, I recollect that in one town, as the result of the school training, persons might be seen cautiously travelling the streets with their hands folded behind them, and walking on tiptoe. The walking ought not to be so

affected by any school requirements as to disturb the natural gait, and the pupils ought not to be obliged to retain a particular attitude for any length of time. In a certain primary school the little ones were never allowed to sit with their knees crossed; and when a little girl in a moment of weariness did so, the teacher placed her in her own chair at the desk, having the knees kept in that position, and then ordered all the other scholars to point at her and hiss.

There is such a thing as having so much order that it is in reality disorder, and this is to be avoided as carefully as too great laxity. Every teacher should have his school under his control, and be able to secure perfect stillness, or uniformity of position and movement, when desired. Two rules lie at the basis of all others respecting order: First, that degree of it should be maintained which is most favorable to the great design of the school; and, second, individual comfort should be secured. No positive standard can be established. In a small school, liberties may be allowed which cannot be in a large one; and one class of pupils may be permitted far greater freedom than another.

As respects position in recitation, it is hardly becoming for the teacher to sit with his feet upon his table; or for the student to recite with one foot on his seat, his elbow on his knee, and his head resting on his hand; yet these were the favorite positions of instructor and instructed at a recent examination in a New England college.

Mr. WHEELER of Cambridge thought the Grecian Bend must have originated in the town where the people walked on tiptoe with their hands behind them. He was in favor of a pretty still school, and would place his standard as this: Every scholar ought to so deport himself as if he were the only one in the room, for a school is not the place for social intercourse. No pupil should be permitted to obtain assistance from another, because it is an unfair demand upon the latter's time, and the help is in danger of being worse than none. The principal cause of noise in walking arises from the rapidity with which scholars move toward the door. They come in more slowly and more quietly; so that, if slow movements can be secured, the disturbance produced in this way will be overcome.

NATHAN E. WILLIS, *Recording Secretary.*

MIDDLESEX COUNTY TEACHERS' ASSOCIATION.

THIS Association held its Sixteenth Annual Meeting in the Town Hall, Arlington, on Friday and Saturday, the 9th and 10th inst.—Mr. Henry Chase, of Watertown, President; and Mr. L. W. Russell, formerly of Watertown, now of Providence, R. I., Secretary. After prayer offered by Rev. Mr. Keyes, pastor of the Universalist Church, and welcome extended by Wm. Parmenter, Esq., Chairman of the School Committee, a paper was read by Miss Annie E. Johnson, Principal of Framingham Normal School, upon the Schools of Massachusetts.

The subject was treated with marked ability, evincing thorough culture and careful thought, while the paper was read in a manner which showed that the

possession and use of the strongest mind are by no means incompatible with the most refined taste and true womanly modesty. A resolution was adopted requesting a copy for publication in the *Massachusetts Teacher*.

In the afternoon a discussion of the question, "What are the best methods of teaching spelling?" was participated in by Messrs. Waterman of Newton, Twombly of Charlestown; Phipps, agent of the Board of Education; Littlefield of Charlestown; Sawyer and Chase; Bement and Russell of Lowell.

Questions were also asked by two ladies, Miss Lathe of Somerville, and another, whose name we regret our inability to learn, since she is, so far as we are aware, the first female who has ventured to take part in the discussions of the Association. Old Middlesex moves.

The question, "To what extent should the Grammar-School master have control over the other schools in his district?" was then discussed by Messrs. Payson of Chelsea, Hale of Cambridge, Davis of Somerville, and Waterman of Newton.

On Saturday, after an excellent practical paper read by John D. Marston, Esq., of Somerville, on "The Teacher's Profession," the question, "What are the defects in the Grammar-School system of Massachusetts?" was discussed by Messrs. Wheeler of Cambridge, Davis of Somerville, and Hale of Cambridge.

The discussions were animated, and the thoughts advanced eminently practical, not the ideas of outside theorists, but of men and women actively engaged in the educational work.

On Friday evening, a lecture was delivered by Rev. A. A. Miner, President of Tufts College, upon —

"The True Aim in Education." Concerning this lecture it is only necessary to say that it was one of Mr. Miner's best efforts, and met with unqualified approval. Despite the announcement at the outset by the reverend gentleman that it would be "dry as a crust," it was listened to throughout with the strictest attention, and was regarded by all as one of the most valuable ever delivered before the association.

After the lecture, the audience listened with great gratification, to some excellent reading of selections, both serious and humorous, by H. H. Lincoln, Esq., Principal of the Lyman School, Boston.

The meeting was very fully attended, over five hundred teachers being present, and was altogether one of great pleasure and profit.

Besides the customary resolutions, the following was unanimously adopted:

Resolved, That the teachers of Middlesex County would hereby express their gratitude to the present Legislature of Massachusetts, for the great step in advance made in the cause of education, by the enactment of a law abolishing the school-district system of the State; believing as they do that its results will be, better school-houses, more efficient teachers, and the general advancement of our system of public instruction.

Middlesex.

PLYMOUTH COUNTY TEACHERS' ASSOCIATION.

THIS Association will hold its next meeting at West Bridgewater on the 4th and 5th of June.

ARITHMETICAL RULES.

Mr. PAYSON, of Chelsea, in his remarks upon teaching Arithmetic, during the discussion at the Educational Room, repeated the arithmetical rules he learned in his youthful days. He has kindly written them out, at our request, for the benefit of our readers. They certainly prove that mathematics and poetry do not go well together. What is gained in harmony is lost in clearness.

RULE FOR ADDITION.

Addition is the adding up of one
Denomination in one total sum.

SUBTRACTION.

When from a greater sum you take a less,
An answer true the difference will express ;
Which, being subtracted from the greater sum,
Will make the *lesser*, then your work is done.

MULTIPLICATION.

Multiplication will to you describe,
Whate'er denominations are allied.
And when correctly multiplied together,
Will then produce the just amount of either.

DIVISION.

Division instructs you without any pother,
How often one sum is contained in another.
And by rightly dividing the whole of your sum,
You'll find a true answer, and then your work's done.

REDUCTION.

Reduction is the bringing or reducing
Your several numbers without any losing.
And when descending multiply the same,
Of every number to one common name.
But when ascending, *then* you must divide
Your several terms, and carry out beside,
Whate'er remains, and place them side by side.

RULE OF THREE.

Sure as the needle points unto the north,
So here three numbers given, require a fourth.
The same proportion surely there must be,
As second to the first must well agree.

Then term the number *third*, which doth command ;
Of quality, or number, *first* ; then understand,
The second term the answer will command.

The *second* and *third* terms when multiplied,
The product by the *first* you must divide.

THE POLITICAL SYSTEM OF CHINA.

A FEW months ago we were in the city of Wu Chang, one of the chief literary cities of Central China, where competitive examinations are held for political appointments, and we purpose to give a sketch of the manner in which they are conducted.

After becoming somewhat acquainted with the writings of Confucius, those who aspire to a literary or political career prepare for competitive examinations in the Universities.

DEMOCRACY OF THE SYSTEM.

Competitive examination was established about the commencement of the Christian era. It is the foundation of the present political system of the empire. It is Democratic in principle, and deserves the attention of statesmen the world over. Under this system a person of the lowest condition may attain to the highest positions of honor. There are several classes who are excluded from entering the course of study, — play-actors, prostitutes, executioners, jailers and inferior servants waiting upon Mandarins. Their children to the third generation are also excluded. The theory adopted is that these persons and their immediate descendants are wanting in those moral qualifications which are necessary in the administration of government. Persons who have lost a parent cannot enter the course of study till after the expiration of three years, inasmuch as hard study is inconsistent with due respect for the dead during that period of time.

CONTRAST WITH THE UNITED STATES.

In the United States, official positions are obtained through personal favor, or on political considerations. Beer and whiskey have influence. Brothers, cousins, friends, are appointed to office by those who have the dispensing of patronage. Party service demands pay. Merit and qualification are too often the least of considerations.

Not so in China. The theory of the system there is, that all civil officers must be literary graduates. Three degrees have been established. The first may be obtained at the colleges in the *Hien*, or district college; the second in the *Fu*, or provincial college; the third in the Imperial University at Peking.

The city of Wu Chang, being a provincial capital at the centre of the empire, and easily accessible, has become one of the chief literary centres. In this respect we may think of it as ranking with Cambridge or Oxford, in England; Harvard or Yale or Ann Arbor, in the United States.

ENTERING THE UNIVERSITY.

The student, having been through the district college, and obtained a degree from the Chancellor, comes to Wu Chang to enter the higher courses. Each student, before coming here, files a paper with the local magistrate, containing the name of his father, grandfather, teacher, his next-door neighbor, stating also

his own age, height and complexion. The names of several literary graduates are required as indorsers for his good character, and one of these is required to be present when the student enters the University.

We meet crowds of students in the streets. They are here from every town and village in the province. The number entering at this University is from six to ten thousand per annum.

THE BUILDINGS.

Passing down one of the streets, we reach the University buildings, occupying a large area, enclosed by a high wall about twenty feet high, covered completely over with placards displaying the name of the successful candidates for honors at the last examination. Entering the enclosure, we behold a paved court filled with long ranges of sheds, with tiled roofs, beneath which are about ten thousand small cell-like apartments or alcoves three or four feet square, open in front, with a seat, and a board which can be placed against the wall on supports for a table. These are the students' quarters, which they occupy during examination.

A Chinese university does not have recitation hall, laboratory, or dormitory. It is not a place where students spend four years in study, but simply a barrack where they congregate for a few days, — a prison rather; for, while here, they are shut in, and are not allowed any communication with their friends.

In the centre of the area stands the "Temple of Perfect Justice," a building erected for the convenience of the examiners and imperial commissioners, who are sent from Peking to decide upon the literary merits of the students, and who are sworn to render an impartial verdict. Spacious apartments are assigned them, which are well furnished, and they are accompanied by a large retinue of servants.

BEAUTIFUL ABILITY.

All of the students who come to this city have taken their first degree in the district college. It is not Master or Bachelor of Arts, but the degree of "Beautiful Ability," which means quite as much in China as that of A. B. does in the United States, and without which no student can compete for higher honors.

The examinations here are held triennially, and there is never less than ten or twelve thousand competitors.

ASSEMBLING FOR EXAMINATION.

It is a great occasion. People from the surrounding country come in to see the honors conferred. Friends are here to witness the triumph of those most dear. The city is filled with strangers. It is a grand harvest-time for hotel and shop keepers. Excitement is at fever-heat. The student who wins brings honor not only to himself, but to his friends. He is on the road to fortune: for, if he passes examination, official position awaits him; wealth is sure. Privilege is one of the results, — graduates, like members of Congress, being exempt from arrest, except for crime. High station in life, favor of the Emperor, — everything worth living for, as viewed from the Chinese standpoint, — is involved in the effort.

Students bring bedding and food, as they are required to stay on the premises several days; servants and friends accompany them to the gate, but are parted from them there by soldiers, who allow none but students to enter. When all are in, the gate is shut and sealed, and a file of soldiers guard all approach to the wall. No book is allowed within the premises, but each student is supplied with paper, pen and ink; is appointed a cell, where he spreads his bed, and places his basket containing his food.

THE CONTEST.

The commissioners announce themes from the "Four Books" of the ancient classics, upon which students are to write three essays and one poem.

As soon as the subjects are given out, all hands apply themselves to composition. They have no aid, can consult no one, but must rely wholly on themselves. As fast as their compositions are finished, they are handed to one class of examiners, whose business it is to see that there are no great defects, and that the rules prescribed have been complied with. If they pass this ordeal, they are copied, so that the judges may not show favoritism by any previous knowledge of the handwriting of the candidates.

A jury of literary men read the essays, which, if they reach a certain degree of excellence, receive a red mark of approval. All that do not come up to this standard are rejected. Those approved are passed on to the chief examiners.

The standard of excellence adopted by the final judges, must be very high or the scholarship exceedingly low; for not more than one hundred out of the ten or twelve thousand obtain the second degree of "Advanced Men," a prosaic title in comparison with "Beautiful Ability."

OVATIONS.

Great ovations await those who pass the ordeal. The best orchestras of the empire are here with one-stringed, two-stringed and three-stringed fiddles, flageolets, cymbals, gongs and drums; cannon are fired, bonfires kindled, lanterns lighted, processions formed, feasts prepared, songs sung, and the whole city joins in the grand jubilee.

Messengers are started to convey the tidings to all the surrounding country. This is an election, and it is just as exciting as a political contest in America. Each district is interested in the success of its candidates, and so drums beat and bonfires blaze over the entire province.

The name of the student who takes the highest honor is placed on the wall at the top of all the others. We cannot read the "crow-tracks," but here they are in large characters, which may be read by the excited crowd from the street.

THIRD DEGREE.

The successful competitors, if they aspire to the third degree, have an allowance from the imperial treasury to enable them to go to Peking, where a similar examination is had. If successful there, they receive the degree of Doctor of Laws, and are prepared to occupy high official stations.

A large number of students reside here. Many who failed this year will apply themselves for three years, and then try again. Old men are here who have been studying for a half-century without success. Men eighty years of age have died in these examination halls, through excitement, while in pursuit of literary fame and the distinction and privileges which lie behind it.

The excitement at the examination is intense, because political and literary aspirations are combined to spur on the aspirant. The ambition which fires the student in an American college to study hard, deprive himself of sleep, and burn "midnight oil," and the desire which animates the politician to secure office, alike excite the student who enters the examination hall.

The democratic element in this political system is remarkable, and the theory of competitive examinations must commend itself to all who believe in a democratic form of government. It has lasted nearly two thousand years, and there must be an element of stability in a system which continues that period of time.

EFFECT ON THE COMMUNITY.

The effect on the community is apparent. In no country is literature held in higher estimation. Wherever we go, we see book-stores. Printing-offices are numerous; not such establishments as that of *The Journal*, but small shops, where men sit at small tables, with blocks on which the "word-characters" are engraved, printing books of history, geography, and small works of fiction.

It is a reading community. The preparation for examination familiarizes a large number of men with history, political economy, and general literature. To be sure it is the history of China, and not of other nations; but we are not to forget that the authentic history of this people reaches back to the time of Moses, and that the "Book of Classics" is as old as the Pentateuch, and that the chief text-book of political economy written by Confucius is as ancient as the prophecy of Isaiah.

The economy of those bygone ages is not exactly fitted to the nineteenth century, and for that reason China is stationary. She is chained to the dead ages.

But, notwithstanding all this, the method of choosing political and military officers by competitive examination gives a powerful stimulus to literary pursuits. Every village has its schools; and ambitious young men, seeing the possibility of attaining positions of honor, apply themselves early to study. Poor people deny themselves comforts that they may educate their sons. Brothers in a family unite to help on one of their number, that all may obtain honor. Virtue in this respect is found in China as well as in our own land.

DEFECTS AND EXCELLENCES.

Unfortunately the profound reverence paid to the Chinese classics robs the system of some of its excellence. If mathematical and other text-books of science were used instead of the "Four Classics," China would have a political system which would challenge the admiration of the world.

But, as it is now, if we were to choose our officials on their ability to write an essay from the book of Genesis, or a poem from a passage in the Song of Solomon, we should be doing according to the present Chinese method. It is an

open question whether that would not be quite as sensible a proceeding as to elect one who has just taken out naturalization papers, and whose only recommendation is, that he keeps a liquor-shop, and can influence voters by supplying them with whiskey!

Lop off the defects of the Chinese system, adopt its excellences, modify some of its parts, and we shall have the true democratic system for official service. We commend it to the attention of the people of the United States.—“*Carleton*,” in *Boston Journal*.

BLAZING STARS.—In the year 1866, a star blazed up in the constellation of the Northern Crown, rapidly attaining the second magnitude. It soon began to decline in brightness, falling in twelve days to the eighth magnitude. It was subjected to spectroscopic observation by William Huggins shortly after it began to fade. This experienced observer was surprised with the phenomenon of two distinct spectra. One of these was the ordinary spectrum of dark lines, showing the existence of a photosphere of incandescent solid or liquid matter inclosed in a vaporous atmosphere. Overlying this was a spectrum consisting of four bright lines. This plainly proved the existence of a second source of light, shown by its peculiar spectrum to be a luminous gas. Two of these lines were the prominent hydrogen lines, and their great brightness showed the gas to be hotter than the photosphere. The conclusion was obvious: the observer beheld a blazing world. A sudden flood of free hydrogen gas had apparently burst from the interior of the star, and was fiercely burning in contact with some other element. The intense heat of this conflagration had also heated the photosphere so as to render its spectrum more vivid.

If, then, the stars are thus liable to become enwrapped in the flames of burning hydrogen, we may speculate as to what would be the fate of the inhabitants of the planets were our sun to emulate the vagaries of its sister-orbs, and burst out in mighty conflagration. That it is not free from flaming hydrogen we shall presently see.—From “*Spectrum Analysis*,” in *Lippincott's Magazine for May*.

INTELLIGENCE.

[Items for this department should be sent to G. B. Putnam, Franklin School, Boston. Please lend your aid in enhancing the interest of the pages devoted to Educational Intelligence.]

J. W. DICKINSON, President of the State Teachers' Association, and Principal of the Westfield Normal School, sailed last month for Europe, where he intends to remain several months. We understand that it is his purpose to return in season to preside at the annual meeting in October.

JOHN S. HAYES, Principal of the Cradock School, Medford, has been elected Principal of the North Grammar School, Manchester, N. H.

ISAAC W. DUNHAM, Superintendent of Common Schools at Troy, N. Y., has been invited to take charge of the Drury Academy at North Adams, at a salary of \$2,200, and will probably accept the office.

DAVID WHITCOMB, of Worcester, has given to the town of Templeton \$4,000 to establish a free library, to be named for John Boynton, his former partner in business in that place, and founder of the free Institute of Industrial Science in Worcester.

SENATOR GRIMES of Iowa has given \$5,000 to Dartmouth College at Hanover for the foundation of two scholarships, two prize funds, and a fund for the benefit of the Social Friends' Library. Another recent benefaction is the foundation of a \$1,000 scholarship by the will of the late William Carr of Newport.

REV. JOHN LORD of Stamford, Conn., whose recent lectures in Boston have been so enthusiastically received, has been appointed to a Historical Lectureship in Dartmouth College.

JOSEPH SEARS of Coleraine has been freed by the Superior Court from a fine imposed upon him by a trial justice for assault in whipping a scholar for misconduct.

Peabody.—The gift of Mrs. Eliza Sutton to the Peabody Institute, in Peabody, of a \$20,000 fund in memory of her son, to be used in buying a reference library, is about to be put to its destined use. The room for this library, fitted up by Mrs. Sutton at a cost of \$13,000, has just been completed.

Ashburnham.—A bequest to the town of Ashburnham for the purpose of founding one or more high schools or academies, made fifteen years ago by a native of the town who became rich in Boston, has now become available by the conditions of the will, and it is expected that one academy at least will be erected soon and put in operation.

Holyoke has six spacious and elegant brick school-houses, which are superior to those of any town of its size in the State.

South Hadley.—Mount Holyoke Seminary is to have a new library building of brick, forty-eight feet by forty-six, and in every particular fire-proof. It will stand a few feet north of the main building, and connect therewith by a covered passage, built in sections, and easy to move in case of fire.

Sheffield Scientific School.—M. D. Collier of St. Louis has just given \$5,000 to purchase apparatus, books and diagrams, to illustrate mechanical engineering; being moved to the gift by the memory of his brother, who studied there last year and died in July. Prof. C. S. Lyman sailed to Europe in April to expend this donation, and his expenses are borne by Mr. Collier.

The Chicago Academy of Sciences, founded in 1856, is now located in a handsome brick edifice, four stories high. The library, reading-rooms and museum are well arranged. The rooms are open all days of the week to persons in search of scientific information, and on Saturdays to the general public. In addition to a

large collection of insects, birds, fishes, snakes, and other things of interest, it has a frame of a mastodon, found near Fort Wayne, Ind., in a good state of preservation.

Senator EDWIN D. MORGAN of New York has given \$10,000 towards an endowment fund of \$100,000 for the Young Ladies' Seminary which Henry Wells, the expressman, has lately built at Cayuga.

The Iowa Agricultural College receives pupils without distinction of sex. While the young men learn farming, the young women learn to cook and keep house.

Pittsfield.—The School Committee now numbers twelve, and they were instructed at a recent town meeting to appoint one or more of their number to superintend the schools. A large proportion of the Pittsfield voters are bitterly opposed to the abolition of the school districts.

Beverly.—This ancient town is fast becoming the most enterprising of all the towns in the Commonwealth. In illustration, it may be stated that only ten years ago the sum of \$5,500 was the extent of the appropriation for schools, while, at the late town meeting, the much nobler sum of \$16,500 was appropriated for current school expenses, exclusive of the Superintendent's salary and other incidental expenses, as well as the cost of erecting three new, first-class school-houses.

Dr. SPITZER of Paris left the sum of 100,000 francs for the maintenance and education of three orphans, — a Catholic, a Protestant, and a Jew.

The Czar has given 100 free scholarships to the University of St. Petersburg. They will cost him each 300 roubles a year.

St. Petersburg, Russia, has eight hundred male and three thousand female teachers of the piano.

In the Friendly Islands, where fifty years ago there was not one native Christian, but gross and unbroken darkness, the regular attendants on worship now exceed 30,000, and contributions to religious objects are over \$15,000 a year. Two hundred and fifty day-schools contain 10,000 pupils.

R. G. PARDEE, so long and favorably known as one of the foremost Sabbath-school workers in the land, died February 4th, 1869. *The Sunday-School Times* of Philadelphia has just published a valuable sketch of his life and labors, from the able pen of John S. Hart, LL. D., accompanied with an excellent portrait of Mr. Pardee. Any one interested in the Sunday-school cause can obtain a copy of the sketch free on application to the publishers of the *Times*.

Beverly. — At the last town meeting in Beverly, it was voted that fifty per cent be added to the amount paid last year to the female teachers of the town, and that the committee be requested to average the distribution of it among the teachers as nearly as possible according to the work done, and the value of their services. Good for Beverly!

BOOK NOTICES.

FISHING IN AMERICAN WATERS. By Genio C. Scott. Harper & Brothers: New York.

Those of our readers who are fond of piscatory sports will like this book. Even we who never have been guilty of doing more than hooking a "shiner" or a "sculpin," find ourselves delighted with it, and may become a disciple of Isaak Walton. It is profusely illustrated, and gives all the information the amateur fisherman will require. The appendix enlightens the sportsman in regard to cookery, and the concocting of drinks. Did the author ever try the pure liquid scooped up from a cool mountain stream?

MY RECOLLECTIONS OF LORD BYRON. By the Countess Guiccioli. Harper & Brothers: New York.

We doubt whether the general estimate of the character of Lord Byron can be much changed. His life may never have been truly written, and he may often have been harshly and wrongly judged; but that he was as excellent in character as he was splendidly endowed will hardly be as clear to the world as it seems to have been to the Countess Guiccioli. Still, one reads the book with much interest, and is very willing to see so gifted a man presented in so favorable a light.

PHINEAS FINN, the Irish member. By Anthony Trollope.
THAT BOY OF NORCOTT'S. By Charles Lever.

The above come to us from A. Williams & Co., 100 Washington Street, where all the publications of the Messrs. Harper may be found.

THE MONTHLY BULLETIN of the Grand National Peace Jubilee, to be held in Boston, June 15th, 16th and 17th, has been received from George Coolidge, No. 3 Milk Street, Boston. The present number is for March and April, and contains the music to be performed.

THE AMERICAN NATURALIST: a Popular Illustrated Magazine of Natural History. Published at Salem, Mass., by the Peabody Academy of Science.

The third volume of this excellent magazine commenced with the number for March. We have on several occasions commended the *Naturalist* to the favorable attention of teachers. We desire to say another earnest word in its behalf. It richly merits a generous support at the hands of teachers for the simple reason that it contains a large amount of matter which a wide-awake teacher can use in the school-room. Here are abundant materials for most interesting and useful object-lessons of a high order. Here is science clothed in a beautiful dress. Note, for example, some of the subjects presented in the March number: Shell Money; The Chimney Swallow; Salt and Fresh Water Clams; The Senses of Sight and Smell; The Farmer of Montana Territory; An Afternoon in Nicaragua; Reviews of numerous scientific books. The April number also is filled with highly interesting matter. The leading article on "The Aboriginal Mound-

builders of Tennessee," is exceedingly instructive and entertaining. The magazine is beautifully printed and illustrated. It is published monthly at four dollars a year. Subscribers to the *Teacher* can obtain it at three dollars a year, by applying to Geo. K. Daniel, jr., at the office of the *Massachusetts Teacher*.

A NEW COURSE IN THE GERMAN LANGUAGE; for the Use of Schools. By Gabriel Campbell, M.A., Professor in the State University of Minnesota. Boston: Woolworth, Ainsworth & Co. pp. 194.

The author of this new course in German declares his purpose in constructing his book to have been to carry out as far as possible the principle of forming German words from the English, by a regular system of consonant changes; to encumber the pupil as little as possible with minor details and exceptional cases; and to draw his illustrations from the language of real life, avoiding, however, colloquial, proverbial and poetical idioms. He invites attention to the philosophical principles involved in teaching the personal pronoun as a terminal element in the declension and gender of the substantive, the classification of irregular verbs, the arrangement of words, and in the use of imitative sentences in connection with the reading-lessons. The fact that the work has already reached the third edition indicates that the author's labors are favorably regarded by teachers of the German language.

A GUIDE TO THE STUDY OF INSECTS, and a Treatise on those Injurious or Beneficial to Crops. By A. S. Packard, jr., M.D. Salem: Press of the Essex Institute.

The sixth part of this publication has been received. Like the preceding parts, it is profusely illustrated and elegantly printed. All who are interested in the study of insects will find Dr. Packard's "Guide" safe and instructive. It is published at fifty cents a part.

BIOGRAPHICAL SKETCHES. By Harriet Martineau. New York: Leypoldt & Holt. pp. 458.

Miss Martineau's sketches were originally for the *Daily News*. They relate to forty-two eminent persons, men and women distinguished in various walks of life, during the present century. The sketches are brief and interesting. The chief events in the life of each subject are compactly given, and the characters are severally drawn with clearness, and a manifest purpose to be truthful and just. The volume is a good one to read at odd moments.

CHIPS FROM A GERMAN WORKSHOP. BY MAX MULLER, M.A. (Two Volumes). pp. 750, 800. C. Scribner & Co., New York. The first volume consists of fifteen "*Essays on the Science of Religion*," and the second of twelve "*Essays on Mythology, Traditions and Customs*." The author of these books has been for twenty years and more a diligent student of these subjects, and has from time to time been publishing in English reviews and magazines, the results of his investigations. In 1868, these *Essays* were printed in London, and have now been republished by Scribner & Co., who are every month thus presenting to the American public the best works that issue from the English press. Muller

seems familiar with the early thoughts of mankind, especially as they have become historic, in connection with the religious literature and sacred traditions of the race. He discusses the writings of the Brahmins, the Zoroastrians and the Buddhists, the mythology of the Greeks and Romans, and the wild traditions of Polynesian savages, with a vigorous style and serious spirit. Although a German by birth and early education, Prof. Muller has gained a masterly skill in the use of our language.

HANDBOOK OF NATURAL PHILOSOPHY. By Rolfe and Gillett. pp. 320. 8vo. Woolworth, Ainsworth & Co.

The favor with which the Handbooks of Chemistry and Astronomy have been received has induced the authors to issue a text-book more elementary in its character than *Natural Philosophy* of the *Cambridge Physics* series. It has been their purpose to furnish something adapted to the wants of Grammar Schools, and we feel quite sure that they have in this important respect been successful.

LIFE AND EPISTLES OF ST. PAUL. By Conybeare and Howson. pp. 1,000. 8vo. cloth, \$3.00. C. Scribner and Co., New York.

This is another of the publishers' reprints from English editions. Abridged editions have been issued in this country, but this presents the text of the London edition *entire*. It contains 17 maps and 82 engravings, and must be regarded as one of the most useful contributions ever made to the literature of the New Testament.

The scenes amid which St. Paul labored, the incidents of his missionary tours, the political and social condition of the Jewish people, and everything which could add interest to this wonderful biography, are fully portrayed.

MANUAL OF PHYSICAL AND VOCAL TRAINING, for the Use of Schools and for Private Instruction. By Lewis B. Monroe. Illustrated by Hammatt Billings. Philadelphia: Cowperthwait & Co.

We alluded to this manual in our last issue, and are very glad now to chronicle its appearance. Those who have enjoyed Prof. Monroe's instructions (and they are many) will give this little volume a warm welcome. Those who have not will be eager to obtain it, that may gain some knowledge of his excellent methods.

LADREYT'S MODERN CONVERSATIONAL FRENCH READER, or Classic Models of Practical French Conversation, drawn from the plays of the best French Authors of the present age. By E. M. Ladreyt, Philadelphia: J. B. Lippincott & Co. pp. 238.

This volume contains selections from "Par Droit de Conquete," "Le Gentil-homme Panore," "Mon Etoile," "La Diplomatie du Menage," and "La Tutrice," all carefully edited by Prof. Ladreyt, who performs with great fidelity whatever he undertakes.

NOW AND FOREVER; OR, JULIETTE. By Mrs. Madeline Leslie. 12mo., pp. 416. Lee & Shepard, Boston.

This volume is the fourth of "Home Life Series," having been preceded by

"Cora and the Doctor," "Courtesies of Wedded Life," and "Household Angel in Disguise."

THUNDER AND LIGHTNING. By W. De Fonvielle. Translated from the French by T. L. Phipson, Ph.D. pp. 216. Charles Scribner & Co., New York.

THE WONDERS OF OPTICS. By F. Marion. Translated from the French by Charles W. Quinn, F.C.S. pp. 248. Charles Scribner & Co., New York.

These two volumes are from gentlemen whose works have attracted much notice in France from the happy manner in which they treat of scientific facts. The volumes were translated and first printed in England, and the American publishers have done good service in bringing them within the reach of scholars here. The first contains thirty-nine wood-engravings, and the second seventy.

We know of no works which the curious student of natural phenomena will read with greater delight.

TOWNE'S SERIES OF MATHEMATICS, including a Primary Arithmetic, pp. 144; Intermediate Arithmetic, pp. 216; Arithmetic, pp. 360; and Algebra, pp. 298; is published at Louisville, by John P. Morton & Co. The author, Mr. E. A. Towne, was formerly Principal of the Burton Academy, Mobile, Ala.

The Primary Arithmetic, presents some good features, but it is defective in the order of progression. For example, on page 9 are such exercises as "1 and 1 are 2; 1 and 2 are 3;" &c., while on the next page the numbers given run up to sixty. On page 16 the pupil is directed to write numbers ranging from 1 to 999; on page 13 are given questions like this: "1 star and 1 star are how many stars?" Little regard seems to have been paid to the comparative difficulty of the operations presented.

The "INTERMEDIATE ARITHMETIC" and the "ARITHMETIC" contain many things of value. The definitions are not in all cases quite accurate. For instance, Multiplication is defined to be "the operation of increasing one number as many times as there are units in another." A number may be *increased* without being multiplied.

The Algebra, so far as we have had time to examine it, appears to be an excellent work.

PHYSIOLOGY AND LAWS OF HEALTH. By Edward Jarvis, M.D. pp. 427. 12mo.

PRIMARY PHYSIOLOGY for schools, by Edward Jarvis, M. D. pp. 167. A. S. Barnes & Co., New York. For sale by H. M. Cable, 117 Washington Street, Boston.

We are happy to call the attention of teachers and committees to these two books, which were issued in 1865, and have so well stood the test of the school-room. Accuracy, thoroughness and conciseness, and utility, are characteristic of them.

ALICE'S ADVENTURES IN WONDERLAND. By Lewis Carroll. With forty-two illustrations by John Tenniel. Boston: Lee & Shepard.

This is so queer and amusing a book that we were beguiled into following Alice through all her wonderful adventures; and we think very many little girls, and boys too, will like to do the same. Messrs. Lee & Shepard know how to bring out a pretty book.